



AGRICULTURE, FOOD AND NATURAL RESOURCES CAREER CLUSTER DESIGN Power, Structural and Technical Systems Pathway

CIP CODE 01.0201

APPROVED PATHWAY:

1. Includes a minimum of three secondary-level credits.
2. Includes a work-based element.
3. Consist of a sequence:
 - Introductory-level course.
 - Technical-level course.
 - Application-level course.
4. Supporting documentation includes:
 - Articulation Agreement(s).
 - Certification.
 - Program Improvement Plan.
 - Program of Study.
5. Technical-level and Application-level courses receive .5 state weighted funding in an approved CTE pathway.

INTRODUCTORY LEVEL

Title	Code	Credit
* ● Introduction to Agriculture	18001	1
* ● Exploratory Agriculture	68001	1

TECHNICAL LEVEL

Title	Code	Credit
Agriscience	18002	1
* ● Agricultural Mechanics	18401	1
* ● Agricultural Welding I	18404/39207	1
* ● Small Engines	18410	1

APPLICATION LEVEL

Title	Code	Credit
Internship	18048	1
Advanced Internship	18049	1
Agricultural Business	18201	1
Agricultural Entrepreneurship	18202	1
Agricultural Leadership and Communications	18203	1
Research in Agriculture	18206	1
* ● Advanced Agricultural Mechanics	18402	1
* ● Agricultural Structures	18403	1
* ● Agricultural Welding II	18407/39208	1
* ● Agricultural Fabrication	18409	1
* ● Advanced Agricultural Power	18411	1

Pathway Design prior to Cluster Review

- * Required courses in pathway approval.
- Must choose **ONE** of the required courses in each level for pathway approval.



AGRICULTURE, FOOD AND NATURAL RESOURCES CAREER CLUSTER DESIGN

AGRICULTURAL TECHNOLOGY AND MECHANICAL SYSTEMS

CIP CODE 01.0201

APPROVED PATHWAY:

1. Includes a minimum of three secondary-level credits.
2. Includes a work-based element.
3. Consist of a sequence:
 - Introductory-level course.
 - Technical-level course.
 - Application-level course.
4. Supporting documentation includes:
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INTRODUCTORY LEVEL

Title	Code	Credit
\$Agriculture Explorations I	68001	0.5
##Agriculture Explorations II	68002	0.5
\$Introduction to Agriculture	18001	1.0

TECHNICAL LEVEL

Title	Code	Credit
Agriscience	18002	1.0
^Agricultural Mechanics	18401	1.0
^Small Power Systems	18410	1.0
^Agricultural Welding I	18404 or 39207	1.0

APPLICATION LEVEL

Title	Code	Credit
##Advanced Agricultural Mechanics	18402	1.0
^Agricultural Construction	18403	1.0
##Agricultural Welding II	18407 or 39208	1.0
^Agricultural Fabrications	18409	1.0
##Advanced Agricultural Power	18411	1.0
^Agricultural Engineering and Technology	18415	1.0
Agricultural Internship	18048	1.0
Advanced Agriculture Internship	18049	1.0
Agribusiness Management	18201	1.0
Agricultural Entrepreneurship	18202	1.0
Agricultural Leadership and Communications	18203	1.0
Research in Agriculture	18206	1.0

Proposed Pathway Design after Cluster Review

Has as specific prerequisite course.

\$ ONE of the courses marked \$ in this section is required.

^ Courses marked ^ have a required prerequisite of either 18001 or 18002

Pathway Recommendations Summary:

General Changes to Pathway

- Recommended name change for pathway:
 - New Pathway name to reflect the need for Agricultural technology and mechanics in Kansas.

No Recommend Changes [CTE Course Competencies and Indicators \(ksde.org\)](https://ksde.org)

- Courses not reviewed by this committee.
 - 39207 Welding Processes I
 - 39208 Welding Processes II
- Courses Reviewed with no changes.
 - 18048 Agricultural Internship (recommended name change from Ag Internship)
 - 18049 Advanced Agricultural Internship (recommended name change from Ag Internship)
 - 18202 Agricultural Entrepreneurship

Courses Reviewed with Recommended Changes

- Courses with updated competencies and benchmarks
 - 68001 Agriculture Explorations I (recommended name change from Exploratory Agriculture) – competencies updated and revised as a .5 credit course. Will serve as prerequisite for new course 6800X Agriculture Explorations II .5 credit course.
 - 18001 Introduction to Agriculture – competencies updated and revised.
 - 18002 Agriscience – competencies updated and revised.
 - 18201 Agribusiness Management (recommended name change from Agricultural Business) – competencies updated and revised.
 - 18203 Agricultural Leadership and Communications – competencies updated and revised.
 - 18206 Research in Agriculture – competencies updated and revised.
 - 18401 Ag Mechanics – competencies updated and revised. Prerequisite of 18001 or 18002 required.
 - 18402 Advanced Agricultural Mechanics – competencies updated and revised. Prerequisite of 18001 or 18002 required.
 - 18403 Agricultural **Construction (recommended name change from Agricultural Structures)** – competencies updated and revised. Prerequisite of 18001 or 18002 required.
 - 18404 Agricultural Welding I – competencies updated and revised. Prerequisite of 18001 or 18002 required.
 - 18407 Agricultural Welding II – competencies updated and revised. Prerequisite of 18001 or 18002 required.
 - 18409 Agricultural **Fabrications** – competencies updated and revised.
 - 18410 Small Power Systems (recommended name change from Small Gas Engines) – competencies updated and revised. Prerequisite of 18001 or 18002 required.
 - 18411 Advanced Agricultural Power – competencies updated and revised. Prerequisite of 18001 or 18002 required.

New Course Recommendations

- NEW courses developed and recommended to be added to this Pathway.
 - 68002 Agriculture Explorations II – Introductory course for middle grades, (prerequisite of 68001 required) .5 credit course.
 - 18415 Agricultural Engineering and Technology – Application rigor focusing on engineering, automation, and other emerging technologies in Agriculture. Prerequisite of 18001 or 18002 required.